

REMARKS

In the October 18,2004 Office Action, the Examiner:

- Rejected claim 1 under 35 U.S.C. 102(b) as being anticipated by *Ueda et al.* (“*Ueda*”, U.S. Pat. No. 5,819,700);
- Objected to claims 2-4 as being dependent upon a rejected base claim; and
- Allowed claims 5 and 6.

Applicants retain the claims in their present form and add new claims 7-9 for matter previously claimed in a different format. No new matter has been added. The pending claims are claims 1-9.

Claim Rejections - 35 U.S.C. § 102

The Examiner has rejected claim 1 under 35 U.S.C. 102(b) as being anticipated by *Ueda*. For a proper showing that this claim is anticipated by *Ueda*, all elements of the rejected claim must be disclosed in the cited reference. The rejected claim is an independent claim.

The Examiner states that *Ueda* discloses "through holes 10, which pass through from a bowl in the upper side of the piston to a lateral side of the piston." However, *Ueda* only discloses a plurality of cutaway portions 10 formed in the projection 40 of the piston 4. These cutaway portions are not through holes passing through from a bowl in an upper side of a piston to a lateral side of said piston, as required by independent claim 1. Moreover, these cutaway portions or grooves cannot be likened to the through holes of the present invention, as they perform different functions and operate completely differently from one another. For example, the cutaway portions 10 of *Ueda* are formed for generating a turbulence for entraining the air and the mixture of the squish areas 9, located on both adjacent sides of each cutaway portion 10, and colliding the entrained air and mixture when the piston is raised in the vicinity of the top dead center of the combustion.¹ However, in the present invention, the fast flow of the gas passing through the through hole 5 reinforces the compression and swirling movement 13 generated between the top land portion of the piston 1 and the upper side of the combustion chamber, and improves the blending function of the

¹ See *Ueda* Col. 5, ll. 7-14.

fuel and air and the combustion function of the engine as well.² Furthermore, the recirculating gas removes wet fuel 11 from the cylinder wall 7 to the center of the combustion chamber, thereby preventing carbon from accumulating between the cylinder wall 7 and the piston 1 and restricting polishing and scuffing of the cylinder wall 7 and the piston 1 due to carbon buildup.

In light of the above, it is respectfully submitted that *Ueda* does not disclose, teach, or suggest all of the limitations of independent claim 1. Accordingly, *Ueda* cannot anticipate any of the independent claims or any of the claims that depend there from.

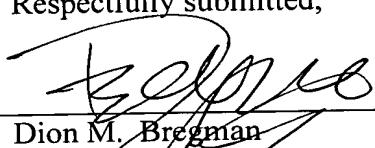
CONCLUSION

In view of the foregoing, it is respectfully submitted that the application is now in a condition for allowance. However, should the Examiner believe that the claims are not in condition for allowance, the Applicant encourages the Examiner to call the undersigned attorney at 650-843-7519 to set up an interview.

If there are any fees or credits due in connection with the filing of this Amendment, including any fees required for an Extension of Time under 37 C.F.R. Section 1.136, authorization is given to charge any necessary fees to our Deposit Account No. 50-0310 (order No. 060945-0143-US). A copy of this sheet is enclosed for such purpose.

Respectfully submitted,

Date: January 18, 2005


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Dion M. Bregman (Reg. No.)
MORGAN, LEWIS & BOCKIUS LLP
2 Palo Alto Square
3000 El Camino Real, Suite 700
Palo Alto, California 94306
(650) 843-4000

² See paragraph 0017 of the present application.